

New Species of North American Dolichopodidae (Diptera).

By M. C. VAN DUZEE, Buffalo, New York.

Systemus americanus n. sp.

Male: Length 3.2 mm. Face covered with white pollen; proboscis and palpi black; front metallic bluish-green, more blue in the center, rather long on account of the antennæ being inserted so low down on the head; antennæ black, the third joint more brown, first and second joints short, third joint long and flattened, about the length of the front; arista terminal, stout, fully one-half as long as the third joint; cilia of the upper orbit black, of the lateral and inferior orbit white.

Dorsum of the thorax and the scutellum dark metallic blue-green, bright but somewhat dulled with almost invisible brown pollen; pleuræ darker-colored than the dorsum and with gray pollen.

Abdomen metallic green, more bronze black on the dorsum towards the apex; hypopygium large, black, the peduncle about as long as the diameter of the hypopygium, and forming a sort of slender seventh segment to the abdomen, being concolorous with it; hypopygium with a small black appendage ciliate with brown hairs on the outer surface near the tip; outer lamellæ yellow, somewhat sickle-shaped with a crooked spine at the base of the bend.

Coxæ and legs black; fore and middle coxæ with white hairs on the front surface, those on the fore pair long and abundant; hind coxæ with a white bristle and several long white hairs on the outer surface; femora with a greenish reflection; the fore pair with a fringe of long white hairs on the lower outer edge; trochanters and knees yellowish; bristles of the tibiæ small; hind metatarsi two-thirds as long as the second joint. Tegulæ, their cilia and the halteres yellow.

Wings tinged with blackish; fourth vein bent forward near the middle of the last section, but parallel with the third vein toward the tip, and ending in the apex of the wing.

Described from one male from the Black Mountains, North Carolina, May (collection of Mr. Nathan Banks).

Gymnopternus flaviciliatus n. sp.

Male: Length 3 mm. Face covered with silvery-white pollen; front blackish with white pollen, which appears brown when viewed from above; antennæ of moderate size, yellow, third joint slightly darkened at apex, somewhat rounded at the tip.

Dorsum of the thorax dark blue-green almost black, thickly covered with brown pollen; scutellum bronze-brown with a central longitudinal ridge.

Abdomen bronze-green with white pollinose spots on the sides of segments three and four; venter, extreme lateral edges of the dorsum of the abdomen, and the epimera metathoracica yellow; hypopygium black with pale yellow lamellæ which are ciliate with yellow hairs.

Coxæ yellow, the middle pair slightly darkened on the outside; fore and middle coxæ with black hairs and bristles on the front surface; hind coxæ with an erect bristle on the outside; the usual row of bristles on the fore tibiæ rather stout, fore tibiæ also with two or three longer bristles on the upper surface; middle and hind tibiæ with stout bristles. Halteres and tegulæ yellow, the latter with black cilia.

Wings grayish hyaline; veins dark brown, yellow at the root of the wing.

Female: Agrees with the male in all but sexual characters.

Described from fourteen males and seven females, taken at Spring Creek, Decatur County, Georgia, July 16th to 29th, by Dr. J. C. Bradley and Mr. M. D. Leonard.

This species runs to *G. ventralis* in the keys, but can be distinguished from that species by the lamellæ of the hypopygium being ciliate with yellow hairs, while in *ventralis* the ciliae are black; the hypopygium is also a little smaller, the antennae a little more pointed, and the pollen on the sides of the abdomen forms distinct spots on the sides of the third and fourth segments, while in *ventralis* it is more evenly distributed.

***Leucostola terminalis* n. sp.**

Female: Length 4.75 mm. Face wide, thickly covered with white pollen; palpi large, whitish with black hairs; front black shining, dulled with gray pollen; antennæ yellow, third joint short, brown except the base; arista dorsal; cilia of the upper orbit black, of the lateral and inferior orbit white; postvertical bristles stout, black.

Dorsum of the thorax bright metallic green with broad reddish coppery stripes on the sides above the root of the wings, and two fine coppery lines one on each side of the acrostichal bristles; these lines are easily overlooked; dorsum with white pollen along the front and lateral edges; pleuræ black with thick white pollen, and with the posterior edges yellow.

Abdomen with the first three segments yellow; the narrow hind margins of these segments and the whole of the fourth and fifth metallic green with coppery reflections and covered with white pollen.

Coxæ yellow, fore pair with a row of five long black bristles on the front surface towards the tip; middle pair black on the outer surface

and with long black hairs on the front surface; hind coxæ with an erect bristle on the outer surface; legs yellow; fore and middle tarsi darkened towards the tip; tips of the hind tibiæ and hind tarsi brown. Tegulæ and halteres yellow, the former with white cilia.

Wings hyaline, strongly tinged with yellowish brown, and with yellowish brown veins.

Described from one female taken by Mr. Nathan Banks at Great Falls, Virginia, June 21st.

This species can readily be recognized by its yellow antennæ and also by the conspicuous coppery spots above the roots of the wings.

***Thinophilus frontalis* n. sp.**

Male: Length 6 mm. Face wide, dark metallic green, with coarse brownish yellow pollen along the sides below, the portion below the suture nearly one-half as long as the upper portion and with a longitudinal ridge; palpi very large, reddish yellow, each as large as the face and covered with coarse black hairs; front broader than the face, widest at the vertex; ocellar tubercle prominent, a carina from this tubercle to the eye margin where the outer vertical bristles are inserted and forming an excavated basin above the antennæ, the outer upper corner of which is reddish coppery, the center violet, and the sides green; front with only a little brownish-yellow pollen near the antennæ; antennæ yellowish below, brownish above, first joint bare above, second as long as the first and as broad as long, third very short with the arista inserted at the base above; orbital cilia black above, yellowish below.

Dorsum of the thorax metallic black with violet reflections, polished, with a central green vitta which reaches the scutellum; scutellum concolorous with this vitta; a deep black spot above the root of the wing; dorsum with coarse yellowish-brown pollen; scutellum with two large and two small marginal bristles; pleuræ blackish-green with thick yellowish-gray pollen.

Abdomen metallic green, with six visible segments, the sixth as long as the others, the incisures bronze-black; abdomen dusted with gray pollen which is thickest along the lower lateral edges; hypopygium small, partly imbedded, rounded behind, with two pairs of long, thick, black lamellæ, which reach the ventral hind margin of the fifth segment, this margin projecting somewhat below and with a pair of black spine-like bristles.

Coxæ black with yellow tips and thick gray pollen; fore and middle pairs with black bristles on the front surface; middle and hind coxæ each with a large black bristle on the outer surface; femora yellow; fore and middle pairs with black hairs below, the former with four

black bristles near the tip on the lower outer edge; hind pair slightly darkened above at tip; fore tibiæ brown with three bristles below, close to the tip; middle and hind tibiæ black; fore and middle tarsi yellow with all the joints black at the tip; hind tarsi black with the first and second joints equal; pulvilli and empodium well developed. Tegulæ, their cilia and the halteres yellow.

Wings grayish-hyaline, brown in front of the third vein; fourth and fifth longitudinal veins and the posterior cross-vein bordered with brown; last section of the fourth vein slightly approaching the third at tip; there is an upward sinus at the center of the last section of the fourth vein.

Female: Agrees with the male in all but sexual characters, except that the palpi are blackish, with white pollen and yellow edges, and the thorax is more thickly covered with pollen. There are six dorsocentral, one large and one small humeral, a post-humeral, one notopleural, two supraalar and one postalar bristles, also one or two small presutural bristles; on the prothorax there is a transverse row of yellowish bristles, those near the fore coxæ large, but those on the dorsal part of the row small. In the male (which I make the type of the species) all the bristles are missing from the mesonotum and scutellum although the specimen is in good condition otherwise.

Described from one male and one female which I took on a salt-marsh on the Manatee River at Bradentown, Florida, in March.

Why do Honey-Bees Discriminate Against Black? (Hym.)

By JOHN H. LOVELL, Waldoboro, Maine.

There has long been a widespread belief among apiarists that a beekeeper will receive more stings when dressed in black than when wearing white clothing. A large amount of evidence has been published in the various bee journals showing beyond question that honey-bees under certain conditions discriminate against black. A few instances may be cited in illustration. Of a flock of twelve chickens running in a beeyard seven black ones were stung to death, while five light-colored ones escaped uninjured. A white dog ran among the bee-hives without attracting much attention, while at the same time a black dog was furiously assailed by the bees. Mr. J. D. Byer, a prominent Canadian beekeeper, relates that a black